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♦ U.S. Economic Developments

Extremely Strong Finish to 1999 Economic Growth

Real gross domestic product (GDP) jumped 7.3 percent in the fourth quarter of 1999, according to the U.S. Department of Commerce's final estimate released in late March. This is the strongest quarterly growth in sixteen years, and up from the third quarter increase of 5.7 percent. To put these numbers in perspective, real GDP rose an average of 4.2 percent per year from 1997 through 1999.

Review of 1999 Economy

The U.S. economy continued to expand well above its average longterm growth rate in 1999. Real gross domestic product (GDP) rose 4.2 percent in 1999, nearly matching the 4.3 percent growth of 1998. This growth is over 1.0 percent above the 10-year average of about 3.0 percent per year from 1990 through 1999. Consumer prices rose 2.2 percent in 1999, up from a 1.6 percent increase in 1998. The energy component of the consumer price index accounted for most of the change from 1998. From December 1998 to December 1999, the energy component of the consumer price index increased 13 percent. The U.S. unemployment rate averaged 4.2 percent in 1999, down from

4.5 percent in 1998. (Source: U.S. Department of Commerce, STAT-USA web site: www.stat-usa.gov.)

California Economic Developments

Review of 1999 Economy

One of the most comprehensive measures of economic well being available for states on a timely basis is nonagricultural employment. The California economy mirrored the U.S. in 1999, as it was characterized by strong nonagricultural payroll employment growth, a falling unemployment rate, and rising, but still low, inflation. In 1999, California nonagricultural employment increased 2.8 percent. While below the 1998 growth rate of 3.5 percent, the 1999 growth rate was the third most rapid of the decade of the 1990s. Most major sectors of the California economy except manufacturing gained jobs in 1999; construction and business services were the fastest growing areas. California construction employment rose 11.1 percent in 1999, and California business services employment increased 6.1 percent. With the strong economy, the California unemployment rate dropped to an average of 5.2 percent in 1999. This is down from an average annual 1998 California unemployment rate of 5.9 percent. As for the U.S., the inflation rate for California

increased in 1999, but remains low by historical standards. The California consumer price index rose 2.9 percent in 1999, up from a 2.0 percent increase in 1998. Escalating housing and energy costs were largely responsible for the 1999 increase.

Extremely Strong Taxable Sales Growth in Late 1999

Board of Equalization data show that taxable sales increased 9.9 percent in the third quarter of 1999 compared to the third quarter of 1998. The preliminary data for the fourth quarter show even stronger growth; taxable sales for the fourth quarter of 1999 were up 10.7 percent over taxable sales in the fourth quarter of 1998. These figures indicate extremely strong growth in the last half of 1999. To put these numbers in perspective, annual taxable sales rose 5.2 percent in 1998 and 6.2 percent in 1997. Unless the preliminary fourth quarter figure is revised downward, taxable sales will have grown over 9.0 percent in 1999. This represents the fastest rate of growth since 1984, when taxable sales jumped 14.5 percent. (Sources: California Employment Development Department (EDD), "Interim Industry Employment," Labor Market Conditions in California, March 10, 2000; EDD Labor Market Information web site: www.calmis.cahwnet.gov; California Department of Finance, Economic *Indicators*, January - February 2000, 1999

Economic Report of the Governor, web site: www.dof.ca.gov; Board of Equalization, News Release #23, March 24, 2000, web site: www.boe.ca.gov.)

An Update on Retail Electronic Commerce Sales Estimates

In March, the U.S. Census Bureau of the Department of Commerce issued its first official measure of Internet commerce.¹ The estimate was made for retail sales of goods and services sold in the fourth quarter of 1999 (October through December) as a component of its traditional monthly retail trade survey (MRTS). In this survey, over 12,000 retail firms were contacted and asked for estimates of their electronic sales.

The quarterly estimate of U.S. retail electronic commerce sales was \$5.3 billion (unadjusted for seasonal variation) for the fourth quarter of 1999. The estimate, which is still preliminary, is subject to sampling error of plus or minus approximately \$0.3 billion.² As estimated by Commerce, electronic commerce accounted for approximately 0.6 percent of total fourth quarter retail sales. For statistical reliability reasons, Commerce does not provide a breakout of online sales by type of goods sold, nor does it provide monthly online sales figures used to compile the quarterly estimates. For the same reasons, no estimates are provided for individual states. The U.S. Department of Commerce plans to issue this report quarterly; estimates for the first quarter of 2000 are scheduled to be released in May.

¹ U.S. Department of Commerce, Bureau of the Census, "Retail E-Commerce Sales for the Fourth Quarter 1999 Reach \$5.3 Billion," March 2, 2000, www.census.gov/Press-Release/www/2000 /cb00-40.html

² The \$0.3 billion statistical sampling margin of error is at the 90 percent confidence interval. There are other sources of nonsampling error of an unknown magnitude in addition to this amount.

The definitions of types of retail sales firms contacted are identical to those used in the traditional MRTS survey. Such firms include stores selling merchandise for household and personal consumption, such as building materials, cars, furniture, apparel, and food (including restaurant sales). Sales made by financial dealers, travel agents, or ticket agencies are not included. Estimates of Internet sales by private research companies such as Forrester Research and Jupiter Communications typically include such sales.3 Therefore, the Commerce fourth quarter estimate of Internet sales is smaller than estimates made by these private firms for the same time period.

While data are not released for individual states, the Commerce figures do provide a standardized measure of electronic commerce sales that can be used to estimate such sales and their consequent 1999 revenue impacts for California. However, such estimates are subject to unknown, but potentially large variation. This is because many assumptions must be made for both U.S. and California sales in deriving statewide estimates since data are not available for various steps in the process.

First of all, the fourth quarter figure needs to be annualized. Sales in this quarter are disproportionately larger than average quarters since the fourth quarter includes the Christmas buying season. Data from Forrester Research indicates that it is not unreasonable to assume that the fourth quarter represents about 40 percent of annual sales.4 Therefore, a reasonable annual estimate of U.S. electronic commerce sales for 1999 would be \$13.3 billion (5.3 / 0.40 = 13.3). California has approximately 12 to 13 percent of U.S. population, income and gross domestic product. However, anecdotal evidence indicates that it is likely that a greater proportion of California households have Internet access and shop online than nationally.⁵ It is likely that California online purchases are about 15 percent of online U.S. purchases. So California electronic commerce purchases for 1999 were likely to have been approximately \$2.0 billion $(13.3 \times 0.15 = 2.0)$.

With this California sales estimate made, it is now possible to determine the sales and use tax revenues associated with these sales. As they are defined by the U.S. Department of Commerce, most of the types of goods sold by retailers surveyed are subject to sales and use taxes. The major exceptions are food and prescription drugs. However, as purchased over the Internet, it is likely that most software and some music and videos are downloaded files and are not considered to be tangible personal property subject to sales and use taxes. Consumers are rapidly adopting new technologies that use downloaded music and video files, making it difficult to specify a percent-

³ Wall Street Journal, "U.S. Unveils New Quarterly Index to Track E-Commerce," March 3, 2000.

⁴ National Retail Foundation (NRF), "NRF/Forrester Research Launches Online Retail Index, Revealing \$2.8 Billion in Consumer Spending in January," March 1, 2000, www.nrf.com/findex/. Annual estimates from this report are combined with quarterly estimates from the Forrester Research data cited in Footnote Number 3.

⁵ Speech presented at the 1999 Annual Federation of Tax Administrators (FTA) Revenue Estimation and Tax Research Conference, September 27-29, 1999, Nashville, Tennessee, "The Internet and State Revenues," David Broomhall, Standard and Poor's DRI.

age of such sales. Taking this into account, we believe it would not be unreasonable to assume that 80 percent of all Internet sales estimated by Commerce are in taxable categories.⁶ So the taxable component of the estimated \$2.0 billion in California electronic sales would be approximately \$1.6 billion $(2.0 \times 0.80 = 1.6 \text{ billion, or } \$1,600 \text{ mil-}$ lion). The average statewide state and local sales rate is 7.92 percent, which includes various transit and other local special district tax rates. Applying this tax rate yields a revenue figure for 1999 of approximately \$127 million $(1,600 \times 0.792 = 127).$

However, it is not likely that all of this revenue would be remitted. Sales and use taxes are typically paid by the retailer, not the consumer. Out-of-state retailers that have no specific business operations in California (technically speaking, not having nexus in California) are not required to collect California taxes from their customers. While consumers are still legally liable for use taxes associated with out-of-state sales, in practice very few consumers pay them, and it is very expensive for the Board to track them and enforce compliance. Previous BOE research on mail order sales indicates that about 50 percent of mail order sales are from out-of-state retailers not having nexus. It would not be unreasonable to assume that a similar proportion of retail electronic commerce purchases would be made from firms not having California

nexus. Making this assumption, an estimate of 1999 California sales and use taxes not collected from electronic commerce sales is approximately \$64 million $(127 \times 0.50 = 64)$.

We reiterate that this estimate only provides an order of magnitude of the unknown true value of electronic commerce revenue losses. As shown in this estimation exercise, there are many assumptions necessary in deriving this figure, and differences in measurement at any one of them change the magnitude of the estimate. These assumptions must be made since we do not have the precise information available. However, the Department of Commerce data provides a statistically valid starting point for estimating California sales and revenues associated with retail purchases made on the Internet.

notes

If you would like to be added to the mailing list, need additional copies, or have any questions or comments, please contact:

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⁶ The *National Retail Foundation* (NRF) press release cited earlier lists types of goods and services purchased online in its index. We assume the U.S. Department of Commerce estimate is similarly comprised after excluding airline tickets, car rentals, and hotel reservations from the NRF list.